within the mixing compartment to an outside of the mixing compartment, placed as an outer wall constituting at least a part of a peripheral wall of the mixing compartment; and

a capsule holding chamber configured to hold the capsule in a portion other than a portion corresponding to the air-permeable filter, the capsule holding chamber being connected to a vacuum device.

- 2. (Amended) The mixer and a capsule in combination for dental restoration material as claimed in claim 1, wherein the vacuum device is an ejector connected to a compressed air supply device for a dental unit.
- 3. (Amended) The mixer and a capsule in combination for dental restoration material as claimed in claim 1, further comprising a cap coupled to the capsule, said air-permeable filter being placed between the capsule and the cap.
- 4. (Amended) The mixer and a capsule in combination for dental restoration material as claimed in claim 3, further comprising a nozzle extending from said capsule and having a mixture passage, said air-permeable filter being disposed within the mixture passage.
- 5. (Amended) The mixer and a capsule in combination for dental restoration material as claimed in claim 1, further comprising an aperture window formed on the peripheral wall, said air-permeable filter being disposed in the aperture window.
- 6. (Amended) The mixer and a capsule in combination for dental restoration material as claimed in claim 1, further comprising:

a plunger disposed within the capsule and configured to extrude the dental restoration material; and

an aperture window formed on the plunger, said air-permeable filter being disposed in the aperture window.--